ABSTRACT OF THE DISCLOSURE

At a master controller of a space switch in a node in a data network, a request is received from a source node that requests a connection to be established through the space switch. This request is compared to other such requests so that a schedule may be established for access to the space switch. The schedule is then sent to the source nodes as well as to a slave controller of the space switch. The source nodes send data bursts which are received at the space switch during a short guard time between successive reconfigurations of the space switch. Data bursts are received at the space switch at a precisely determined instant of time that ensures that the space switch has already reconfigured to provide requested paths for the individual bursts. The scheduling is pipelined and performed in a manner that attempts to reduce mismatch intervals of the occupancy states of input and output ports of the space switch. The method thus allows efficient utilization of the data network resources while ensuring virtually no data loss.